

DNR Aerial Photography - README File

In response to the EPA Records Request regarding the Bremerton Gas Works matter
September 21, 2018

This summarizes the aerial images provided in the initial submittal, along with descriptive information regarding those images as well as related information regarding DNR's aerial film archive, the DOT film archive, and NON-DNR imagery in our possession.

IMAGERY PROVIDED with this submittal:

- Scans of all aerial photo 9x9 inch paper prints available in the DNR print archive
- Digital Orthophoto images for available DNR digital orthophotos.
- Digital Orthophotos from the USDA "NAIP" program, clipped to the Area of Interest.
- Army Mosaic-1944: scanned paper copy of "War Department Corps of Engineers US Army" mosaic.

NOTE: The digital orthophotos are georeferenced for use in GIS software, and the 1994-2005 orthoimages are referenced to Washington State Plane Coordinate System, North Zone, NAD 83, whereas the remaining digital orthoimages are referenced to Washington State Plane Coordinate System, South Zone, NAD 83. All values in US Survey Feet.

There are a total of 52 image files in this submittal.

**See the included "FileDirectoryLISTING-annotated.pdf" for complete list of individual photos and more details on the various files*

DNR FILM ARCHIVE

- DNR's film archive consists of upwards of 2000 rolls of aerial negatives stored on 250-500 foot rolls of 9-inch aerial film. This archive has not been scanned, but specific frames can be scanned if required. It is a labor intensive process and generates enormous image files up to 1GB in size that are difficult to open and use for those not familiar with photogrammetry and digital aerial imagery. As in this matter, we typically begin by providing scans of the available paper prints for review by the requester. Many times the print scans meet their needs without expending extensive labor time. Included on page 1 of the "*List of Aerial Photos.pdf*" document provided with this submittal is a listing of all DNR imagery covering the site.

DOT FILM ARCHIVE

- In 2014, DNR was given custody of the WA Department of Transportation's (DOT) aerial film archive. DOT retains ownership of the film. There are no paper prints available, and no standard flight indexes exist, making it extremely difficult to determine flight coverage and locate individual images. Included on page 2 of the "*List of Aerial Photos.pdf*" document provided with this submittal is a listing of a handful of flights we believe would cover this site. If required, the film could be examined and pertinent frames scanned and digital files provided.

NOTE: The DOT imagery was not readily available to DNR staff, and only since 2014 have we had direct access to this film.

USDA NAIP ORTHOIMAGERY

- We have included DNR's version of the orthoimagery obtained from USDA's National Agricultural Imagery Program (NAIP). The source imagery has been resampled, reprojected, and re-tiled to meet DNR's needs. The original NAIP orthoimagery and additional information is available from this USDA website: <https://datagateway.nrcs.usda.gov/>

HEXAGON IMAGERY PROGRAM (HxIP) Imagery

- The DNR has entered into a multi-agency license agreement with Hexagon to obtain access to the 2015 and 2017 High-Resolution orthophoto imagery. The current license agreement does not allow DNR or the other partners to share the licensed imagery outside of our respective agencies. Please contact the Hexagon representative below for Washington for information about obtaining the HxIP imagery.

Ascent GIS, Spokane WA - Mike McGuire 509-747-2495

NOTE: The Hexagon high-resolution imagery was collected in conjunction with the 2015 and 2017 NAIP imagery, which is being provided with this submittal. The NAIP is 1-meter resolution whereas the HxIP imagery is 30cm resolution.

Referenced files:

FileDirectoryLISTING-annotated.pdf
List of Aerial Photos.pdf

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